

**REMARKS**

In the present action, claims 1,2,5,6,9,11,13,19,20,28,29 and 65-93 are pending and presently stand rejected. Claim 29 was objected to for depending on a previously cancelled claim. Claims 66,83,90 and 93 were rejected under 35 USC 112, second paragraph as containing indefinite terminology. Claims 1,2,9,11,13,19,20 and 28 were rejected under 35 USC 103(a) as being unpatentable over Crowley (7,142,114) in view of Nelson Jr (6,297,727), Quinn et al. (2005/0101843) and Evanyk et al. (2004/0225199). Claims 5 and 6 were rejected under 35 USC 103(a) as being unpatentable over Crowley in view of Nelson, Quinn, and Evanyk in further view of Ikefuji (5,774,062). Claim 29 was rejected under 35 USC 103(a) as being unpatentable over Crowley, Nelson Jr., Quinn et al., and Evanyk et al in further view of Zeps et al (6,937,154). Claims 65,69 and 74 were rejected under 35 USC 103(a) as being unpatentable over Evanyk et al. in view of Jeutter et al. (6,583,722). Claim 66 was rejected under 35 USC 103(a) as being unpatentable over Evanyk et al. and Jeutter et al. in further view of Zeps et al. Claim 67 was rejected under 35 USC 103(a) as being unpatentable over Evanyk and Jeutter in further view of Crowley. Claim 68 was rejected under 35 USC 103(a) as being unpatentable over Evanyk and Jeutter in view of Lye et al (2004/0100376). Claim 70 was rejected under 35 USC 103(a) as being unpatentable over Evanyk and Jeutter in further view of Quinn (2005/0101843). Claims 71 and 72 were rejected under 35 USC 103(a) as being unpatentable over Evanyk and Jeutter in further view of Anderson (7,026,941). Claim 73 was rejected under 35 USC 103(a) as being unpatentable over Evanyk and Jeutter in further view of Ghazarian (7,034,683). Claims 75,77 and 79 were rejected under 35 USC 103(a) as being unpatentable over Crowley in further view of Lu et al (6,172,609), Zeps et al., and Levanon et al (7,652,188). Claims 76 and 78 were rejected under 35 USC 103(a) as being unpatentable over Crowley, Lu et al., Zeps et al., and

Levanon et al, in further view of Evanyk et al. Claims 81 and 82 were rejected under 35 USC 103(a) as being unpatentable over Crowley, Lue et al, Zeps et al., and Levanon et al., in further view of Stilp (7,023,341). Claims 83,84,,88, and 89 were rejected under 35 USC 103(a) as being unpatentable over Evanyk et al in further view of Crowely. Claim 87 was rejected under 35 USC 103(a) as being unpatentable over Evanyk et al, and Crowley, in further view of Janky et al (6,166,626). Claims 90,92 and 93 were rejected under 35 USC 103(a) as being unpatentable over Evanyk et al. in further view of Quinn et al, and Jeutter et al. Claim 91 was rejected under 35 USC 103(a) as being unpatentable over Evanyk et al, Quinn et al., and Jeutter et al., in further view of Anderson (7,026,941)

#### **Claim 29**

Claim 29 was objected to for depending on a previously cancelled claim. Claim 29 has been amended to properly depend on independent claim 1.

#### **Claims 66,83,90 and 83 - 35 USC 112 ,second paragraph**

Claims 66,83,90 and 93 were rejected under 35 USC 112, second paragraph as containing indefinite terminology. Claim 66 was amended to remove the insufficient antecedent basis of the “said personal wireless device”. Claim 83 was amended to address the antecedent basis for “second sensor”, “internal microprocessor”, and “second stage”. Claim 90 was amended to address multiple antecedent term issues. Claim 93 was amended to address issue with “the bearer of said patch” language. Reconsideration is formally requested.

**Claims 1,2,9,11,13,19,20 and 28 -- 35 USC 103(a)**

Claims 1,2,9,11,13,19,20 and 28 were rejected under 35 USC 103(a) as being unpatentable over Crowley (7,142,114) in view of Nelson Jr (6,297,727), Quinn et al. (2005/0101843) and Evanyk et al. (2004/0225199). The Applicant respectfully traverses the Examiner's rejection and seeks reconsideration in light of the following amendments.

The Applicant respectfully traverses the Examiner's assertions that the Crowley reference discloses an autonomous wireless transmitter as claimed. The Examiner asserts that the interrogator (10) would be considered autonomous because it "is transmitting and responding independently with the transponder (40) without outside control". The Applicant respectfully asserts that this is in error. The term "autonomous" within the Applicant's claims clearly does not refer to the interaction between the receiver and the sensor as by that definition all wireless receivers would be autonomous (and the limitation was added to an already claimed wireless system). Instead, by the industry definition of autonomous the present invention claims a wireless reader that operates without requiring human activation (autonomously). The portable probe assembly described and claimed in Crowley clearly does not teach or suggest such an independently operating reader. Rather Crowley clearly teaches the use of a portable system to be operated by technicians by approaching a patient within a given range. The present invention, however, allows patients to be monitored without direct intervention, for test results to be relayed at any given time when finalized, and for these results to be automatically monitored without outside intervention. This is not taught or suggested by Crowley. Reconsideration is formally requested.

Additionally, the Examiner asserts that Nelson teaches a flexible transponder and therefore it would have been obvious to combine with Crowley to arrive at the claimed flexible

patch. The Applicant respectfully traverses this assertion and seeks reconsideration. The Applicant's claimed patch comprises more than a simply adding a flexible transmitter to the Crowley system. The present invention claims a flexible patch that incorporates both a RFID tag as well as a sensor responding to biological stimulus all within the flexible patch on a patient's skin. The mere mention of a semi-flexible id tag in Nelson would not, even in light of Crowley, suggest the incorporation of a multi-component testing and reporting flexible patch as claimed by the present invention. Reconsideration is formally requested.

The Applicant further asserts that the Quinn reference, while teaching the use of patches to incorporate a sensor for monitoring radiation, fails to assist the claimed autonomous limitation discussed above and purely relies on technician activated monitors. Reconsideration is formally requested.

Finally, while the Evanyk reference may teach the use of remote monitoring of traditional physical system functions, its descriptions are limited to athletic monitoring and the monitoring of patients in hospital or nursing home settings. The present invention, however, claims more than simple biological heart rate, etc. monitoring from remote environments. By monitoring radiation exposure the present invention claims structure and advantages not taught or contemplated by any of the cited references alone or in combination. If police, military, security, or rescue personnel were outfitted with the claimed structure, individual body responses would be registered corresponding to radiation exposure. With multiple sources combined with global positioning of the individuals, location of the radiation source could be quickly and easily identified. This advantage of the present invention is embodied by its autonomous wireless reader monitoring and relaying radiation data from the flexible patch sensor. Reconsideration is formally requested.

Claim 2

The Examiner recites portions of Crowley (Col 5, lines 15-22 and col 6, lines 52-60) in support of assertion that Crowley teaches a substantial portion of the RFID tag and sensor module being integrated into a substrate disc. The Applicant respectfully disagrees as the cited portions merely contemplate integrate of the sensor and fail to discuss integrating the RFID tag into the substrate.

Claim 9

The Applicant traverses the assertion the Crowley teaches or suggests the RFID reader consisting of a cellular telephone or personal digital assistant, beeper etc. as asserted. The cited portions of Crowley merely teach that the reader is a hand held portable device but make no efforts in either the drawings or the description to suggest or imply its integration into any other device. Rather, at all times the portable reader taught by Crowley appears and is discussed as a dedicated device for the single purpose of monitoring the sensor. Reconsideration is requested.

Claim 11

The Applicant believes that the insufficiencies of the rejection of the independent claim upon which claim 11 depends is sufficient to establish its allowability.

Claim 13

The Applicant respectfully asserts that the cited passages of Crowley (Col 5, lines 15-20 and col 6, lines 46-51) do not in fact teach or suggest an RFID tag in combination with a sensor formed as an integrated circuit as asserted by the Examiner. Reconsideration is requested.

Claim 19

The Applicant believes that the insufficiencies of the rejection of the independent claim upon which claim 19 depends is sufficient to establish its allowability.

Claim 20

The Applicant believes that the insufficiencies of the rejection of the independent claim upon which claim 20 depends is sufficient to establish its allowability.

Claim 28

The Applicant respectfully traverses the assertion that it would be obvious to one skilled in the art to use the wireless communication of Evanyk with Crowley to arrive at the claimed limitations. Crowley is directed towards monitoring patient condition within a hospital setting. Evanyk is directed towards monitoring patient general condition remotely. The present invention, however, monitors a biological response to radiation remotely which is not an obvious combination of the cited references, nor would it be suggested by either or both of the two references. Reconsideration is requested.

**Claims 5 and 6 -- 35 USC 103(a)**

Claims 5 and 6 were rejected under 35 USC 103(a) as being unpatentable over Crowley in view of Nelson, Quinn, and Evanyk in further view of Ikefuji (5,774,062). The Applicant respectfully incorporates by reference the above arguments setting forth the inadequacy of the underlying references to render obvious the claims upon which Applicant's claims 5 and 6 depend. Reconsideration is requested.

**Claim 29 - 35 USC 103(a)**

Claim 29 was rejected under 35 USC 103(a) as being unpatentable over Crowley, Nelson Jr., Quinn et al., and Evanyk et al in further view of Zeps et al (6,937,154). The Applicant respectfully traverses this rejection and seeks reconsideration. In addition to the aforementioned arguments regarding the underlying references, it should be noted that Zeps teaches the use of a

computer or PDA to be actively used by a user to verify security access including sending an image of the operator for verification. Zeps, in other words, teaches completely away from the claimed autonomous reader integrated into a cell phone. The entire purpose of Zeps is for the active operation of one attempting to get security access not for the autonomous monitoring as claimed by the present invention. The Applicant respectfully asserts that Zeps cannot be combined with the other asserted references to render claim 29 obvious. Reconsideration is formally requested.

**Claims 65,69 and 74 -- 35 USC 103(a)**

Claims 65,69 and 74 were rejected under 35 USC 103(a) as being unpatentable over Evanyk et al. in view of Jeutter et al. (6,583,722). The Applicant traverses this rejection and seeks the Examiner's reconsideration. Most notably, the present invention in claim 65 actively recites limitation wherein the remote device communicates the unique sensor ID and unique wireless ID to a remote server which uses this information to send the wireless device the information or software necessary to communicate with the unique sensor ID. This allows the present invention to utilize a wireless device that can be made compatible with a wide plurality of unique sensors by uploading the data or software necessary to interact with them. The cited portions of Evanyk, however, merely recite that software may be located on receiver and that they may be "upgraded or updated". This does not teach the claimed limitations wherein the remote server loads software onto the wireless device relative to a particular sensor id that was relayed to the server from the wireless device as claimed by the present invention. Although the Applicant respectfully disagrees with the assertion that Jeutter teaches a substrate with both sensor and RFID, the Applicant asserts that as Evanyk fails to teach the underlying claimed

limitations of updating software or receiver data based on the transmittal of the sensor id that the combination fails. Reconsideration is formally requested.

**Claim 66 - 35 USC 103(a)**

Claim 66 was rejected under 35 USC 103(a) as being unpatentable over Evanyk et al. and Jeutter et al. in further view of Zeps et al. The Applicant traverses this rejection and seeks the Examiner's reconsideration. Most notably, the present invention in claim 66 actively recites limitation wherein the remote device communicates the unique sensor ID and unique wireless ID to a remote server which uses this information to send the wireless device the information or software necessary to communicate with the unique sensor ID. This allows the present invention to utilize a wireless device that can be made compatible with a wide plurality of unique sensors by uploading the data or software necessary to interact with them. The cited portions of Evanyk, however, merely recite that software may be located on receiver and that they may be "upgraded or updated". This does not teach the claimed limitations wherein the remote server loads software onto the wireless device relative to a particular sensor id that was relayed to the server from the wireless device as claimed by the present invention. Although the Applicant respectfully disagrees with the assertion that Jeutter teaches a substrate with both sensor and RFID, the Applicant asserts that as Evanyk fails to teach the underlying claimed limitations of updating software or receiver data based on the transmittal of the sensor id that the combination fails.

Furthermore, the PDA discussed in Zeps fails to teach the advanced monitoring integration into a cell phone. Zeps fails to contemplate or suggest the referencing of a particular sensor ID to a remote server such that the cell phone can be sent the proper software to interact



with that particular sensor. Therefore, the addition of Zeps still fails to teach the underlying limitations of the claimed invention. Reconsideration is formally requested.

**Claim 67 - 35 USC 103(a)**

Claim 67 was rejected under 35 USC 103(a) as being unpatentable over Evanyk and Jeutter in further view of Crowley. The Applicant respectfully incorporates by reference the arguments presented as the underling rejection of independent claim 65 upon which this claim depends. The Applicant asserts that this claim is allowable for at least those reasons.

**Claim 68 -- 35 USC 103(a)**

Claim 68 was rejected under 35 USC 103(a) as being unpatentable over Evanyk and Jeutter in view of Lye et al (2004/0100376). The Applicant incorporates the objections to the Evanyk and Jeutter combination. In addition, the Applicant notes that the only discussion of immunoassay in Lye refers to test strips requiring “off-line extraction” which points away from their integration into the self sustaining sensor system of the present invention. Reconsideration is formally requested.

**Claim 70 -- 35 USC 103(a)**

Claim 70 was rejected under 35 USC 103(a) as being unpatentable over Evanyk and Jeutter in further view of Quinn (2005/0101843). The Applicant respectfully traverses this rejection and seeks reconsideration. The Applicant respectfully notes that none of the cited references teaches the uploading of software to the wireless device by way of a remote server matching the required information or software to the unique sensor. Additionally, the claimed

interaction of the remote server in combination with radiation sensors provides a unique advantage for in the field anti-terrorism usages that would not be provided by a mere combination of Quinn with the cited reference.

**Claims 71 and 72 -- 35 USC 103(a)**

Claims 71 and 72 were rejected under 35 USC 103(a) as being unpatentable over Evanyk and Jeutter in further view of Anderson (7,026,941). The Applicant respectfully traverses this rejection and seeks the Examiner's reconsideration. Although the Anderson reference describes the usage of a MEMS sensor, the Applicant respectfully asserts that none of the cited references teach or suggest the claimed flexible system of the present invention where the wireless receiver communicates with a remote server such that its communication software or data is modified to correspond to a unique sensor ID of the sensor it is monitoring. In this way the present invention provides a flexible and more universal monitoring system than is contemplated or suggested in any of the cited references either alone or in combination. Reconsideration is requested.

**Claim 73 -- 35 USC 103(a)**

Claim 73 was rejected under 35 USC 103(a) as being unpatentable over Evanyk and Jeutter in further view of Ghazarian (7,034,683). The Applicant respectfully traverses this rejection and seeks reconsideration. Neither the Ghazarian reference nor the Evanyk reference either alone or in combination teach or suggest the use of GPS in combination with the claimed adaptable receiver that is modified from a remote server such that it can properly receive and transmit data from a variety of different sensors as does the claimed invention. Reconsideration is formally requested.

**Claims 75,77, and 79 -- 35 USC 103(a)**

Claims 75,77 and 79 were rejected under 35 USC 103(a) as being unpatentable over Crowley in further view of Lu et al (6,172,609), Zeps et al., and Levanon et al (7,652,188). The Applicant respectfully traverses this rejection and seeks reconsideration. The Lu reference merely teaches a receiver with multiple protocols imbedded. The present invention claims much more as it claims a receiver that communicates a sensor unique id to a remote server and then receives information or software downloads to allow it to communicate with that particular unique sensor. The system in Lu still requires the various sensors actually being contemplated at the time of the receiver construction and does not provide the flexibility or benefits of the claimed invention. Furthermore, the Applicant notes that the Zeps reference fails to teach, as argued previously, the use of a cell phone to transmit medical condition through a cell phone over multiple communication protocols. The Zeps reference is a secure login identification system and therefore is not obvious to combine with Crowley and even doing so does not render the claims as a whole obvious. Reconsideration is formally requested.

**Claims 76 and 78 -- 35 USC 103(a)**

Claims 76 and 78 were rejected under 35 USC 103(a) as being unpatentable over Crowley, Lu et al., Zeps et al., and Levanon et al, in further view of Evanyk et al. The Applicant respectfully asserts that claims 76 and 78 are allowable for at least the same reasons asserted for allowability of independent claim 75 upon which they depend.

**Claim 80 -- 35 USC 103(a)**

Claim 80 was rejected under 35 USC 103(a) as being unpatentable over Crowley in view of Lue in view of Zeps in view of Levanon in further view of Janky. The Applicant respectfully traverses this rejection and seeks the Examiner's reconsideration. The Applicant respectfully asserts that Crowley does not disclose the use of a cell phone at all not to mention the use of one with a unique id. The Applicant respectfully submits that a patent directed towards hiding a transmitter within a vehicle to communicate with cell phone towers does not combine with Crowley to read on the present invention which comprises an integrated medical communication through a cell phone as claimed. Reconsideration is formally requested.

**Claims 81 and 82 -- 35 USC 103(a)**

Claims 81 and 82 were rejected under 35 USC 103(a) as being unpatentable over Crowley, Lue et al, Zeps et al., and Levanon et al., in further view of Stilp (7,023,341). The Applicant respectfully asserts that claims 81 and 82 are allowable for at least the same reasons as those stated for independent claim 75 upon which they depend.

**Claims 83,84,88 and 89 -- 35 USC 103(a)**

Claims 83,84,88, and 89 were rejected under 35 USC 103(a) as being unpatentable over Evanyk et al in further view of Crowely. The Applicant respectfully traverses this rejection and seeks reconsideration. As stated above, neither Crowely nor Evanyk contemplate, teach or suggest the claimed limitations wherein the personal wireless device first checks unique id of the sensor skin patch and retrieves relevant information and software from a remote server. This is

not taught nor suggested by either Evanyk or Crowley. This is definitely not taught in the cited paragraphs 81-83. Reconsideration is formally requested.

**Claim 87 -- 35 USC 103(a)**

Claim 87 was rejected under 35 USC 103(a) as being unpatentable over Evanyk et al. and Crowley, in further view of Janky et al (6,166,626). The rejection is traversed for the same reasons set forth in the response to the rejection of claim 80.

**Claim 90,92, and 93**

Claims 90,92 and 93 were rejected under 35 USC 103(a) as being unpatentable over Evanyk et al. in further view of Quinn et al, and Jeutter et al. The Applicant respectfully traverses this rejection and seeks reconsideration. The Applicant notes that neither Evanyk, Quinn nor Jeutter teaches the limitation wherein the unique wireless device not only authenticates the unique sensor ID using a remote server but that the remote server then sends the wireless device information relative to the sensor data. As has been argued throughout this response, this flexibility allows the present invention to adapt wireless receivers to accommodate a wide variety of sensors and test strips with a remote flexibility not known in any of the cited art. Reconsideration is formally requested. Additionally, the Applicant respectfully reasserts the argument that Quinn's radiation detection is not properly combinable as previously asserted.

**Claim 91 -- 35 USC 103(a)**

Claim 91 was rejected under 35 USC 103(a) as being unpatentable over Evanyk et al, Quinn et al., and Jeutter et al., in further view of Anderson (7,026,941). The Applicant

respectfully traverses this rejection and seeks reconsideration. The Applicant notes that claim 91 is allowable for at least the same reasons set forth for the allowability of claim 90 upon which it depends.

The Applicant asserts that claims 1,2,5,6,9,11,13,19,20,28,29 and 65-93 are in condition for allowance and seeks expeditious response. Reconsideration and allowance are respectfully requested.

Respectfully Submitted,

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